

## INVESTMENT PORTFOLIO TRACKING SYSTEM AND METHOD

### BACKGROUND OF THE INVENTION

#### 1. Field of the Invention

5 The invention relates generally to a management system for investments and, more particularly, to a system and method that track performance of investments that are kept in one or more accounts with a computer that accesses investment records from the account databases over a computer network, such as the Internet, and generates comprehensive accounting and financial reports of security investment portfolios.

#### 2. Description of the Related Art

10 On-line trading has increased at a rapid pace in recent years due in large measure to the ever increasing popularity of the Internet. On the investor's side, the popularity of on-line trading has come in large part from lower commissions, easy access to research and news information, real-time quote services, real-time confirmation of trading, and the ability to view such information in a graphic or tabular format upon user demand.

15 On the services side, more financial institutions have begun offering on-line trading services to meet the increased demand from investors. Managing investor accounts on-line is attractive to financial institutions for several reasons. First, on-line trading requires significantly less manpower to operate than traditional investment services provided through telephone or in person. This is because many of the tasks that were previously handled by  
20 brokers and data entry personnel can be carried out automatically by a computer. In essence, the investor becomes the broker and the data entry person, as it is the investor who makes a decision on a trade based on the research that he or she has conducted and remotely enters the information for executing the trade. Second, financial institutions have discovered that the ease of on-line trading invites more trading. Therefore, whatever

discounts in commissions that are offered to investors is made up in part by the increased trading volume.

It is common today for an investor to have multiple trading accounts. An investor may have one trading account with a traditional broker, one with a favorite on-line broker, and another with an on-line broker offering the lowest commission on trades. The investor typically receives a monthly statement from each of these brokers. The monthly statement provides a summary of the trading activity for that month and a snapshot of the investments currently held. If the account is accessible on-line, the account holder may retrieve this and other information over the Internet, such as a history of transactions, investments currently held, and a portfolio summary indicating cash available, amount borrowed on margin, value of the investments currently held, and net portfolio value.

To keep track of all of his or her investments collectively, the investor will need to purchase an investment tracking software or set up an account at an investment management web site. These forms of tracking investments, however, are very limiting. The investment tracking software that is available are sometimes very limiting in that it is not plugged into a database of current stock prices and is thus unable to update the status of the investment portfolio in real-time. The investment management web site is limiting in that it keeps track of only the investments that are currently held and not sold positions. Once an investment is sold or otherwise closed out, that investment is deleted from the portfolio. As a result, the investor is unable to track the performance of all of his or her investments, past and present.

In general, the investment portfolio tracking systems that are currently available provide only the basic information about investments. For example, most systems are available to provide a gross rate of return on a stock investment based on that stock's current price and the purchase price, but they do not take into account other factors that are relevant in computing a more representative rate of return, e.g., the holding period, the commissions that were paid, the amount of cash that was invested for that investment, the tax liability if that investment was closed out, etc.

Therefore, investors are currently unable to track their investment portfolio in a meaningful and useful way. Moreover, if they have multiple accounts, they are unable to track the performance of their investments collectively, unless they undergo the cumbersome process of entering their investment transactions into a software or web site database. Even so, they would still be unclear about the true collective performance of their investment portfolios, because they would receive only the basic performance information which does not take into account all of the factors that are necessary to give a meaningful rate of return on the money invested.

There currently is no standardization of accounting and financial presentation of investment portfolios, which gives pertinent, easy to understand information to investors. Further, there currently is no financial service or software that tracks the performance and current real net worth of a portfolio of investments after commissions, other costs, margin interest and taxes. An investor desiring such information needs to perform the analysis using a spreadsheet, but this way of generating tracking investments is prone to errors, time consuming, and virtually impossible to do for an extended period of time.

### SUMMARY OF THE INVENTION

An object of the invention is to perform the accounting and financial analysis for the investor to produce comprehensive reports on the performance and/or current real net worth of an investment portfolio automatically based on the transaction data of the investment portfolio.

Another object of the invention is to provide an investment portfolio tracking system that receives a user request to generate a performance report and automatically retrieves the necessary transaction data to generate the performance report from one or more of the user's trading accounts that are kept at different places.

Still another object of the invention is to provide an investment tracking system that is able retrieve transaction data from a plurality of different accounts and to generate a

single financial report that is representative of the collective performance of all of the different accounts.

5 The above and other objects of the invention are achieved with a server computer, programmed as an application service provider (ASP) or a web site, that is connected over a computer network, such as the Internet, to different account databases and to computers of end users, which include individual investors and professional money managers.

10 The web site is responsive to user requests made using a browser interface, programmed on the user's computer, e.g., Netscape Navigator or Internet Explorer, to produce a double-entry, real-time presentation of various user-requested financial reports. One form of a user-requested financial report is similar to a balance sheet and profit/loss statements, including commissions, other costs, margin, margin interest, cash invested, and related income tax expenses and liabilities. The investments or securities may be any publicly traded securities including stocks and bonds (individually and/or mutual funds), both short and long positions, and options, both puts and calls.

15 The financial reports generated by the investment portfolio tracking system according to embodiments of the invention comply with GAAP (General Accepted Accounting Principles) and are completely auditable. Further, the single entry to double entry system employs built-in checks and balances so that accounting errors are eliminated.

20 Additional objects, features and advantages of the invention will be set forth in the description of preferred embodiments which follows.

### BRIEF DESCRIPTION OF THE DRAWINGS

The invention is described in detail herein with reference to the drawings in which:

Figure 1 is a schematic illustration of the investment portfolio tracking system according to an embodiment of the invention;

25 Figure 2 is a sample home page of a web site that implements the investment portfolio tracking system according to an embodiment of the invention;

Figure 3 is a sample registration page of the web site;

Figure 4 is a page that is displayed to the user when the user successfully logs into the web site;

Figure 5 is a page displayed to the user when the user chooses to add a portfolio;

Figure 6 is sample page for inputting tax payment information;

5      Figures 7A-7F are sample pages for inputting securities transaction data;

Figure 8 is a portfolio summary page that shows the balance sheet and the net worth activity for that portfolio;

Figures 9A-9V are several other sample reports generated by the investment portfolio tracking system according to an embodiment of the invention;

10      Figure 10 is a sample input screen for manually classifying stocks into industry sectors;

Figure 11 is a flow diagram of the program steps that are executed by the remote server 10 when the user logs into the web site and accesses a portfolio;

15      Figure 12 is a sample input screen for inputting hypothetical sales and a sample output screen generated after execution of the hypothetical sales; and

Figure 13 is a graphical report that is based on the performance comparison between one or more portfolios and a stock index.

20      The accompanying drawings, which are incorporated in and constitute a part of the specification, illustrate presently preferred exemplary embodiments of the invention, and, together with the general description given above and the detailed description of the preferred embodiments given below, serve to explain the principles of the invention.

#### DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

25      The investment portfolio tracking system according to an embodiment of the invention is illustrated in Figure 1 as a remote server 10, including a processing unit 20 and a database 30. The remote server 10 is an internet ASP (Application Service Provider) or a web site and is programmed as an investment portfolio management system for use by individual investors and professional money managers.

In another embodiment of the invention, the remote server 10 is an intranet server for a brokerage house, an investment bank, an on-line broker, or any other entity that manages investment accounts. Hereinafter, a brokerage house, an investment bank, an on-line broker, or any other entity that manages investment accounts will be referred to as a  
5 "financial institution." In general, a "financial institution" is any entity, virtual or real, that sells, deals, and/or warehouses currency, equity investments, and/or mortgages.

The remote server 10 is connected to a plurality of user computers 40 over a network connection 50, to a plurality of financial institution databases 60 over a network connection 70, to a security price database 80 over a network connection 90, and to a  
10 currency exchange rate database 81 over a network connection 91.

The user computers 40 may take a variety of forms. They may be personal computers, desktop and laptop, hand-held computers capable of both a hard-wire and wireless network connection, e.g., Palm Pilot®. The network connections 50, 70, 90, 91 may be any one or combination of the following: Internet, intranet, extranet, local area  
15 network (LAN), wide area network (WAN), and the connections may be hard-wired or wireless, e.g., cellular, PCS, infrared, satellite, etc., or any combination of these.

The remote server 10 is connected to the network connections 50, 70, 90, 91 through a bi-directional communication interface 15 for sending out requests for data, such as transaction data and security price data, and receiving the requested data. It also  
20 includes an input management unit 16 for receiving identification data about an investment portfolio and a request to generate a performance report of the investment portfolio from a client computer, and an output management unit 17 for transmitting data representative of the performance report to the requesting user. The processing unit 20 of the remote server 10 is programmed to generate the performance report of the investment portfolio from the  
25 transaction data and the security price data.

The interface between the user and the remote server is a browser, e.g., Netscape Navigator or Internet Explorer, that is programmed on the user's computer. Where the user's computer is a hand-held computer, the interface between the user and the remote



method of interest compounding. The default values and selection are shown in Figure 4, and the user may change any of the values and selection. The web site will store the updated information in the database 30 and display them the next time the user accesses this page.

5           The general information web page also provides four hyperlinks for portfolio management, 121-124, a hyperlink 125 to input tax payments, and a hyperlink 127 for entering portfolio transaction data manually. Hyperlink 121 (View) displays a portfolio summary for the portfolio that the user specified in menu 126. In this example, the user specified the portfolio AWC, and so, upon selecting hyperlink 121, the portfolio summary  
10   for the portfolio AWC will be displayed. An example of a portfolio summary is shown in Figure 8. If the user specifies the portfolio ALL and selects the hyperlink 121, a combined portfolio summary of all the portfolios listed in the menu 126 will be displayed.

          Hyperlink 122 (Add) permits the user to add a portfolio using the portfolio input page illustrated in Figure 5. The portfolio input page prompts the user to specify a  
15   portfolio name and to select between an automatic or manual portfolio tracking method. With an automatic portfolio tracking method, the user inputs identification information about the investment account in which this portfolio is kept. The identification information includes the name of the financial institution (Portfolio Location), the account name or number, and the password for accessing the transaction data for that account from the  
20   financial institution database. With a manual portfolio tracking method, the user inputs all the transaction data related to that portfolio using the input screens shown in Figures 7A-7F.

          Hyperlink 123 (Edit) permits the user to edit any of the information that he or she entered when adding the portfolio. One aspect of the portfolio that the user may edit is the  
25   industry classifications for each of the stocks in the portfolio. The editing of the industry classifications is carried out using the input screen of Figure 10. Hyperlink 124 (Delete) permits the user to delete the portfolio that the user specified in the menu 126.

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Hyperlink 125 (Tax Payments) displays a tax payment page illustrated in Figure 6. The tax payment page is used to input the tax payments which the user may make from quarterly taxes needed on ordinary income as well as on gains made on stock trades. This information is not available to financial institution databases. Therefore, regardless of whether the user selected an automatic or manual method of tracking his or her portfolio, the tax payment information must be entered manually using this page. However, it is possible to automate this data gathering procedure also, e.g., by tapping into database of the Internal Revenue Service, by accessing an on-line bank account from which the tax payments are regularly made, or by accessing a database of the Certified Public Accountant who regularly makes the tax payments on behalf of the user, etc.

When hyperlink 127 (Manual Inputs) is selected, the user is prompted to enter the transaction data for the portfolio specified in the menu 126. The input screens for entering the transaction data are shown in Figures 7A-7F. The input screen of Figure 7A records BUY transactions. The input screen of Figure 7B records SELL transactions. The input screen of Figure 7C records adjustments to the margin balance. The input screen of Figure 7D records dividend distributions. The input screen of Figure 7E records stock splits. The input screen of Figure 7F records cash adjustments. All manually entered data are stored in the database 30.

The processing unit 20 of the remote server 10 is programmed to generate one or more financial reports requested by the user based on the transaction records of the user that are retrieved from the database 30 and/or the financial institution databases 60, and the current or past security price information retrieved from the security price database 80. Preferably, the current price of a security reflects the most recent sale price of that security as traded in the exchange in which that security is listed. However, the invention may be implemented with a database in which the current price of a security is the most recent sale price of that security, including trades that occur in after-hours exchanges.

The financial report request of the user is sent from the user computer 40 to the remote server 10 which then determines the location of the necessary data and retrieves it.

Once the remote server 10 has retrieved the necessary data, the system can perform the necessary processing and calculations to generate the data for the financial reports requested by the user. The data is then formatted into the requested report presentation and transmitted back to the user's web browser screen. The user is able to view the report and then print the report if desired. Examples of the financial report output screens are provided below. It is not necessary, although it is possible, to store the financial report output at the remote server 10, because the user may store it locally on his or her computer 40 if the user wants to keep an electronic record of the report.

The web page illustrated in Figure 8 provides a financial position report of a user's investment portfolio as of the current date and a default period. It includes a balance sheet including the real net worth of the user's investment portfolio (upper half), and the profit/loss activity of the user's investment portfolio for a set period (lower half). The user may change the relevant dates for this report by selecting the hyperlink 201 or the user may select a more detailed financial report by selecting any one of the links 202-220 (hyperlinks are depicted in Figure 8 by shading).

A number of other financial reports can be generated using the invention. These reports can be selected by using the drop down menu 221 illustrated in Figure 8. The drop down menu includes all available financial reports. They are listed in the table below which provides an explanation of the financial report and the corresponding figure number. All of these reports comply with GAAP (General Accepted Accounting Principles) and are completely auditable.

Report	Figure	Description
Bought	9A	History of BOUGHT transactions
Sold	9B	History of SOLD transactions.
Margin Alert	9C	Indicates to the user those stocks that, on an individual basis, have fallen below the margin maintenance requirements.
Holding Period	9D	Calculates the holding period for each stock (in months and days) in portfolio.
Dividend	9E	History of dividend distributions, cash and stock.
Yield	9F	Calculates the total, monthly, and annualized yield for the stocks that distributed dividends.

Report	Figure	Description
Commission	9G	History of commissions that were charged to both BOUGHT and SOLD transactions.
Portfolio Status	9H	Calculates the current gain/loss for each stock in portfolio.
Cash Activity	9I	History of cash transactions, deposits, withdrawals, interest, etc.
Cash Invested	9J	History of cash investments made by the user.
Margin Activity	9K	History of margin loans in connection with stock purchases.
Margin Interest Expense	9L	History of margin interest expenses that were incurred in connection with the margin loans.
Margin Interest Payable	9M	History of margin interest payments based on whether the investment in stocks procured on margin was closed out.
Gross Gain/Loss (Month End)	9N-1	Calculates gain/loss, both realized and unrealized, for each stock in portfolio, without taking into account commissions, other costs, margin interest, and taxes. The period for the report is "Month End," which means that the report looks at the performance of investment purchases made during a particular month, by freezing that month's performance and not reflecting any after month end activity.
Net Gain/Loss (Month's End)	9N-2	Calculates gain/loss, both realized and unrealized, for each stock in portfolio, while taking into account commissions, other costs, and margin interest. This is a "Month End" report and taxes are not accounted for in this report.
Gross Gain/Loss (Year-To-Date)	9N-3	Calculates gain/loss, both realized and unrealized, for each stock in portfolio, without taking into account commissions, other costs, margin interest, and taxes. The period for this report is "Year-To-Date," which means that the report reflects current year's performance through the date of the report. This enables the user to measure the current performance of the portfolio or to see the year-to-date performance of securities bought in previous months.
Net Gain/Loss (Year-To-Date)	9N-4	Calculates gain/loss, both realized and unrealized, for each stock in portfolio, while taking into account commissions, other costs, and margin interest. This is a "Year-To-Date" report and taxes are not accounted for in this report.
Gross Return on Securities (Month's End)	9O-1	Similar to Gross Gain/Loss (Month End) report, and in addition calculates a gross, monthly, and annualized rate of return based on the holding period.
Gross Return on Securities (Year-To-Date)	9O-2	Similar to Gross Gain/Loss (Year-To-Date) report, and in addition calculates a gross, monthly, and annualized rate of return based on the holding period.

Report	Figure	Description
Net Cash Return on Securities (Month's End)	9P-1	Similar to Net Gain/Loss (Month End) report, and in addition calculates a gross, monthly, and annualized rate of return based on the holding period.
Net Cash Return on Securities (Year-To-Date)	9P-2	Similar to Net Gain/Loss (Year-To-Date) report, and in addition calculates a gross, monthly, and annualized rate of return based on the holding period.
IRS Capital Gain/Loss Form	9Q	Generates an IRS form Schedule D. Preferably, this report is automatically sent to CPA, lawyer, maybe even IRS.
Taxes Expense	9R	Calculates the state and federal tax liability, both realized (current) and unrealized (deferred), for all stocks in portfolio.
Taxes Payable	9S	Attributes taxes paid on realized stock transactions and calculates estimated taxes owed.
Cash Net Proceeds	9T	Calculates the gain/loss for each stock in portfolio that has been sold while taking into account all costs including taxes.
Net Worth	9U	Calculates the gain/loss for all stocks in portfolio while taking into account all costs including taxes.
Net Worth Financial Position (HOLD)	9V-1	Similar to Figure 8, but includes an assumption that all stocks in portfolio are being held.
Net Worth Financial Position (SOLD)	9V-2	Similar to Figure 8, but includes an assumption that all stocks in portfolio has been sold.
Net Worth Financial Position	9V-3	Same as Figure 8.
Others	App. A	Year-To-Date - Net Book Value Return Month End - Net Book Value Return Year-To-Date - Gross Cash Return Month End - Gross Cash Return

Each report shown in Figures 9A-9V has two sections, an input section and an output section. The input section displays parameters that the user may edit, and the output section displays the content of the report. The input section also has a "PROCEED" button

which the user may use to regenerate the output section based on different parameters that he or she specified.

When each report is accessed from the portfolio summary page (Figure 8), the input page displays the default values for the parameters and any values that are passed from the portfolio summary page. For example, the date range and the portfolio selection are passed from the portfolio summary page. The user is not constrained to these parameters, and may edit these parameters to customize the report that is produced in the output section.

For example, Figure 9H is a Portfolio Status Report as of June 30, 1999 for all stocks in the portfolio AWC. If the user wishes to generate a Portfolio Status Report with different parameters, e.g., for an earlier date, and/or for all of his or her portfolios, the user would input the earlier date in the input box 230, select ALL from the portfolio drop-down menu 231, and click on "PROCEED." The new Portfolio Status Report that is produced will be generated based on the new inputs.

The portfolio drop-down menu 231 of all reports (Figures 9A-9V) contains the same selections as the portfolio drop-down menu 126 of the General Information web page (Figure 4). In addition, the portfolio drop-down menu 231 identifies the sectors in which the user holds investments, e.g., Transportation, Internet, Semiconductor, Retail, etc. If the user selects one of the sectors and clicks on "PROCEED," the financial report that is generated will be a composite report for all stocks in his or her portfolio that belong in that sector. The classification of a stock into a particular sector is carried out by the remote server 10 based on the S&P classifications.

Alternatively, the user may define the classifications employing an input screen illustrated in Figure 10. For each stock in the user's portfolio, the user is able to manually select up to two classifications and specify weighting factors as the user finds appropriate. The classifications that are displayed when the user accesses this input screen is either the most recent classifications specified by the user or, in the absence of this, the classifications as assigned by Standard and Poor (S&P). All of the S&P classifications are available to the user to choose from, in a drop-down menu format, when manually classifying the stocks in

his or her portfolio. When the user clicks on "PROCEED," the changes specified by the user will be stored.

The financial reports can be outputted in a variety of different formats, in either cents or whole dollars. The format shown in Figures 9A-9V may be generated by the browser based on HTML (Hyper-Text Markup Language). A more stylized output incorporating images, graphics, and charts, e.g., in a PDF format, may be printed using the "PRINT" button or graphed using the "GRAPH" button from the financial report data.

Figure 11 is a flow diagram of the program steps that are executed by the processing unit 20 of the remote server 10 when the user logs into the web site and requests one of the reports.

First, in Step 310, the username and password are checked against the list of valid usernames and passwords stored in the database 30. If either the username or the password is not valid, the program exits and the user is advised that the username and/or password are not valid. If the username and password are valid, the account identification information of the portfolio(s) selected using the menu 126 of Figure 4 is retrieved in Step 320. This information includes, for each portfolio, the name of the financial institution, the account name or number, and the password for accessing the financial institution database 60. In Step 330, the remote server 10 transmits a request for transaction data, including the account name or number and the password, to one or more of the financial institution databases 60. The remote server 10 waits for a response from the financial institution databases 60 in Step 340, and when the requested data arrives, processes the data to figure out what security price data that it needs, e.g., security name and relevant dates, and transmits a request for security prices to the security price database 80 (Step 350). The remote server 10 waits for a response from the security price database 80 in Step 360, and when the requested data arrives, processes the this data and the transaction data it received from the financial institution databases 60 to produce the data for generating financial position report illustrated in Figure 3 (Step 370). The actual formatting of this data to be

placed in browser viewable format is done in Step 380 and the transmission of the formatted data is done in Step 390.

The retrieval of transmission data from the financial institution databases 60 may be performed in other ways that do not require the remote server 10 to act as a surrogate to the users. For example, the financial institutions may provide the investment portfolio management system according to another embodiment of the invention direct access to their databases in exchange for a fee, e.g., a flat annual fee for each user of the system who has his or her trades handled by them. This fee arrangement will provide a monetary incentive to the financial institutions to promote to their clients the use of the investment portfolio management system described herein. The annual fee incentive can be enhanced with branding dollars, in exchange for which the investment portfolio management system of the invention promotes those financial institutions who are providing access to their databases.

Further, as described above, the investment portfolio management system according to an embodiment of the invention provides the user with an option of inputting transaction data for a portfolio manually. Users who choose this option are offered discounts on using the investment portfolio management system, because the financial institution databases at which the accounts for these users are kept need not be accessed. As a consequence, the financial institutions need not be paid a fee for these accounts and the resulting savings can be passed onto the users. This option may be preferred by investors who make only a handful of trades per year. Further, the manual inputs permit the user to create and track a "paper trade" or mock investment portfolio.

The investment portfolio management system according to an embodiment of the invention may also be implemented with a feature to handle "what-if" scenarios defined by the user. With this feature, the user designates one or more currently-held securities for a hypothetical sale (as of the date specified on the input screen) and generates a performance report of his or her investment portfolio after taking into account this hypothetical sale or sales. Figure 12 illustrates a sample input screen for a user who has accessed the what-if scenario hyperlink. The input screen lists all of the securities that the user is currently

holding in the specified portfolio. The user designates a listed security for a hypothetical sale by checking the box that is displayed next to that security. A box is also displayed next to the option "Sell All Securities."

The "what-if" scenario feature is useful, because it allows the user to see what the true return on his investment would be if the user decides to sell that security on that day. Absent the what-if scenario, the return on investment is based on unrealized gains and losses. Unrealized gains and losses do not take into account the commission that is charged upon sale of a security and the tax consequences on the realized gains and losses.

The investment portfolio management system according to an embodiment of the invention further provides a unique "single entry" method of producing a "double entry" accounting presentation, and produces the tracking and reporting of cash accounts, cash invested, and margin accounts.

The Securities and Cash Invested Return on Investment reports (Figures 9O-1, 9O-2, 9P-1, 9P-2) provide a weighted monthly and annualized rate of returns to correctly account for securities that are held less than 30 days and for securities that are bought mid-month and sold before the close of that month.

The Gain/Loss reports (Figures 9N-1, 9N-2, 9N-3, 9N-4), the Securities Return on Investment reports (Figures 9O-1, 9O-2), and Cash Return on Investment reports (Figures 9P-1, 9P-2), all described above, have four different presentation types. They are categorized as unrealized (investments that are held), realized (investments that are sold), short-term (investments that are held less than twelve months), and long-term (investments that are held more than twelve months). The short-term and long-term periods, as defined, are the current time periods recognized by the Internal Revenue Service.

With these categories, the investment portfolio management system according to an embodiment of the invention can calculate the state and federal tax liabilities that result from a stock transaction, using identified short-term and long-term tax rates for state and federal taxes that the user specifies. State and federal taxes may also be presented in deferred and current categories relating to unrealized and realized gains and losses,



respectively. The investment portfolio management system also gives the user the capabilities of e-mailing quarterly reports to his or her tax preparer who provides estimated tax payment services.

Based on the all the reports that are generated, investment portfolio management system produces net worth financial position statements for the investor. This statement may be for one portfolio or for all portfolios. The financial position statement, which is comparable to a balance sheet, is generated for a point of time, that the user specifies. The statement takes into account current value of securities, reserve for taxes on sold securities, net cash proceeds on sold positions, margin and margin interest, cash invested, state and federal taxes (unrealized, realized and short-term, long-term), and net worth.

The detailed net worth activity statement, which is comparable to a profit/loss statement, is provided for a period of time. It reflects short-term gains and losses, both unrealized and realized, and long-term gains and losses, both unrealized and realized, dividends, cash and stock, interest income, commissions, other costs, margin interest, and state and federal taxes. These results are also presented as a percentage basis of total revenues, a percentage basis of bought basis, and a percentage basis of average outstanding cash invested. These statements are presented in real-time, with an option for providing automatic updates at any period specified by the user, e.g., 1 minute, 10 minutes, 1 hour, etc.

Embodiments of invention described above rely in part on formulas to generate the reports illustrated in Figures 9A-9V. These formulas have been tested out on a master spreadsheet, which is attached hereto as Appendix A. Appendix B provides a formula reference sheet which sets for the source or formula for the numbers that are shown in the master spreadsheet. Appendix A also contains four reports, labeled "Others" in the report table provided above. These reports are provided as part of the drawings.

In the description given herein, a purchase or buying of a security includes both buying of a security for subsequent selling thereof for realization of the gain or losses based on the rise or fall of the security's price, and selling of a security for subsequent buying

thereof for realization of the gains or losses from the fall or rise in the security's price. This latter method is known as "short selling." The invention is also applicable to options investing, in which the buying is referred to as a "call" and the short selling is referred to as "put." The invention is further applicable to mutual funds, bonds, and all other types of investment vehicles.

Also, the financial report generating feature of embodiments of the invention described above may be implemented in software that resides in a server computer for a particular financial institution. The server computer may be an intranet server or a local area network server. In any event, brokers, employed by the financial institution, would access this server computer over the internal network (intranet), and generate various financial reports for clients who have accounts with the financial institution. In the course of generating the financial reports, the server computer would tap into the database of the financial institution to obtain the necessary transaction records and security price data. In this implementation, access to an external database is not necessary.

Further, the investment portfolio tracking system may be configured to generate reports in several different foreign languages and to be applicable not only to investments bought and sold in dollars, but also to investments bought and sold with foreign (or hypothecated) currencies. The conversion of the report data into dollars or any other user-specified currency would be based on the currency exchange rate retrieved from the currency exchange rate database 81.

In another embodiment of the invention, the user may conduct a comparison between the performance of any one or combination of his or her investment portfolio and the general indices, e.g., Dow Jones Industrial index, S&P 500 index, NASDAQ Composite index, Russell 2000 index, etc. A sample comparison report is shown in Figure 13. Other types of comparisons are possible too. For example, the combined performance of stocks classified in the Internet sector may be compared against a common Internet index, e.g., Goldman Sachs Internet Index.

In the input screen for this report, the user specifies one or more portfolios that he or she would like to compare and the index against which the one or more portfolios are to be compared. In the example, ALL portfolios are specified for comparison against the Dow Jones Industrial index. The comparison result is displayed as a historical chart as  
5 illustrated in the bottom part of Figure 13.

The comparison need not be against an index. It may be against a single stock. For example, if the user wanted a graphical report on how his or her semiconductor stocks performed against Intel Corp., which is considered to be a bellweather stock in the semiconductor sector, the user manually inputs the ticker symbol for Intel Corp.—INTC—  
10 and click on "COMPARE."

While particular embodiments of the invention have been illustrated and described above, it will be clear that the invention can take a variety of forms and embodiments within the scope of the appended claims.

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